





IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: David W. Brown

Attorney Docket No. ROYG-1-1001

Serial No.: 09/633,633

Group Art Unit:

2124

Filing Date: August 7, 2000

Examiner:

JOHN Q. CHAVIS

Title:

MOTION CONTROL SYSTEM AND METHOD

REQUEST FOR CONTINUED EXAMINATION TRANSMITTAL LETTER

TO THE COMMISSIONER FOR PATENTS:

RCE Transmittal

Transmitted with this letter is

- Request for Continued Examination (7 pages); (1)
- RCE Transmittal; **(2)**
- Supplemental IDS (9 pages) (3)
- (4) Form PTO 1449 (5 pages)
- Non Patent Literature References (6) (5)
- Check No. 11151 for \$385; and (6)
- a return postcard. **(7)**

B. Additional Fee Charges or Credit for Overpayment

The Commissioner is hereby authorized to charge any fees under 37 C.F.R. §§ 1.16, 1.17 and 1.18 which may be required during the entire pendency of the application, or credit any overpayment, to Deposit Account No. 501050. This authorization also hereby includes a request for any extensions of time of the appropriate length required upon the filing of any reply during the entire prosecution of this application. A copy of this letter is enclosed.

25315

CUSTOMER NUMBER

-1-

701 Fifth Avenue, Suite 4800 Scattle, Washington 98104 206.381.3300 • F: 206.381.3301

BLACK LOWE & GRAHAM ***

ROYG-1-1001TLA

Direct all communications to:

Mark D. Byrne

BLACK LOWE & GRAHAM 701 Fifth Avenue, Suite 4800 Seattle, WA 98104 Phone: 206.381.3300

Fax: 206.381.3301 byrne@blacklaw.com

Respectfully submitted,

BLACK LOWE & GRAHAMPILE

Mark D. Byrne U

Registration No. 50,125 Direct Dial: 206.957.2483

EXPRESS MAIL CERTIFICATE

I hereby certify that this communication is being deposited with the United States Postal Service via EXPRESS MAIL LABEL NO. EL963728174US under 37 C.F.R. § 1.08 on the date indicated below addressed to: MAIL STOP RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

June 4, 2004

Date of Deposit

Mula Kant

BLACK LOWE & GRAHAM ***

25315

ROYG-1-1001TLA

-2-

701 Fifth Avenue, Suire 4800 Scartle, Washington 98104 206.381.3300 • F: 206.381.3301



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

David W. Brown

Attorney Docket No.:

ROYG-1-1001

Serial No.:

09/633,633

Group Art Unit:

2124

Filing Date:

August 7, 2000

Examiner:

John Q. Chavis

Title:

MOTION CONTROL SYSTEM AND METHOD

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313

Sir:

In accordance with 37 CFR §1.56, the Applicant respectfully submits this Supplemental Information Disclosure Statement as part of the accompanying Request for Continued Examination to call to the attention of the Examiner the references listed on the attached Forms PTO/SB/08A and PTO/SB/08B for consideration in the prosecution of the above-referenced application for U.S. patent. Copies of the non-patent literature documents cited in this Information Disclosure Statement are enclosed. Citation of a reference in this Information Disclosure Statement is not an admission that the reference is prior art to the present invention.

- 1 -

ROYG-1-1001SUPPIDS

BLACK LOWE & GRAHAM™

701 Fifth Avenue, Suite 4800 Searde, Washington 98104 206.381.3300 • F: 206.381.3301

25315 CUSTOMER NUMBER

REMARKS

I. U.S. PATENTS

- U.S. Patent No. 6,292,174 to Mallet et al. discloses an interface device that provides cursor control with force feedback. A display screen is divided into border interior regions with different cursor movement characteristics in different regions.
- U.S. Patent No. 6,028,593 to Rosenberg et al. discloses a system for simulated physical interaction by a user with simulated objects displayed on a computer. Force feedback is provided based on a mapping position on the simulated object and the physical position of the user object.
- U.S. Patent No. 5,821,920 to Rosenberg et al. discloses an apparatus for interfacing a flexible object with an electrical system.
- U.S. Patent No. 6,147,647 to Tassoudji et al. discloses a resonator antenna comprising a resonator formed from a dielectric material.
- U.S. Patent No. 6,366,272 to Rosenberg et al. discloses a force feedback interface device where a simulated object on the screen manipulates a physical object of the interface device.
- U.S. Patent No. 6,353,850 to Wies et al. discloses a force feedback interface device in which the force feedback is based on a force effect file incorporated into a Web page.
- U.S. Patent No. 6,061,004 to Rosenberg discloses a force feedback system in which the position of a user controlled object is detected and a graphical object is displayed on a display screen at a position corresponding to the position of the physical object.
- U.S. Patent No. 6,046,727 to Rosenberg et al. discloses a position sensing interface in which a manipulateable object is coupled to a mechanical linkage. Sensors detect movement of the mechanical linkage, and a dedicated microprocessor provides a host computer with information from the sensors.
- U.S. Patent No. 6,219,032 to Rosenberg et al. discloses a force feedback interface device in which the desired force sensation is generated based on graphical objects, inner operating system functions, and a location of the cursor.

-2-

ROYG-1-1001SUPPIDS

BLACK LOWE & GRAHAM ***

25315

701 Fifth Avenue, Suite 4800 Seattle, Washington 98104 206.381.3300 • F: 206.381.3301

- U.S. Patent No. 6,078,308 to Rosenberg et al. discloses a force feedback system in which, when a mouse encounters a click surface defined by a graphical user interface, a force is output opposing movement of a user object in the direction of the click surface.
- U.S. Patent No. 6,317,116 to Rosenberg et al. discloses a system for providing a click surface in a graphical environment that, when in contact with the cursor, causes a force to be generated opposing movement of the user object.
 - U.S. Patent No. 6,246,390 to Rosenberg discloses an input device for computers.
- U.S. Patent No. 6,100,874 to Schena et al. discloses a mouse having force feedback capabilities.
- U.S. Patent No. 6,166,723 to Schena et al. discloses a mouse having force feedback capabilities.
- U.S. Patent No. 6,128,006 to Rosenberg et al. discloses a mouse having a cursor control wheel that is provided with force feedback capabilities.
- U.S. Patent No. 6,243,078 to Rosenberg discloses a system for generating force feedback using conventional mouse buttons and wheels coupled to an actuator.
- U.S. Patent No. 6,191,774 to Schena et al. discloses an interface for applying force feedback to a computer mouse.
- U.S. Patent No. 6,131,097 to Peurach et al. discloses a system for authoring a geometrical database incorporating touch or haptic feedback.
- U.S. Patent No. 6,374,255 to Peurach et al. discloses a method of offering geometrical databases that incorporate touch or haptic feedback.
- U.S. Patent No. 6,285,351 to Chang et al. discloses an interface tool for allowing a user to design force sensations for use with a force feedback interface device.
- U.S. Patent No. 6,300,936 to Braun et al. discloses an architecture for allowing a plurality of application programs to interface with a force feedback interface device without conflicts.
- U.S. Patent No. 6,304,091 to Shahoian et al. discloses a capacitive position sensor that generates a signal having a phase shift relative to an input driver signal based on relative positions of a vane and a stator.

- 3 -

ROYG-1-1001SUPPIDS

BLACK LOWE & GRAHAM ***

ZDJID
CUSTOMER NUMBER

701 Fifth Avenue, Suite 4800 Seartle, Washington 98104 206.381.3300 • F: 206.381.3301

U.S. Patent No. 6,288,705 to Rosenberg et al. discloses a force feedback interface system for computers in which indexing features allow control of the cursor when an offset between local and display frames exists.

U.S. Patent No. 5,438,529 to Rosenberg et al. discloses a percussion system that functions both as a percussion signal input device and a mouse for a personal computer.

U.S. Patent No. 5,623,582 to Rosenberg discloses a system for converting movement of an object into electrical signals that may be processed by a computer.

U.S. Patent No. 5,576,727 to Rosenberg et al. discloses a linkage system the movement of which is transduced into electrical signals that are processed by an application on a computer. Force feedback commands are transmitted back to the linkage apparatus. The linkage apparatus converts the force feedback commands into movement that is felt by the user.

U.S. Patent No. 5,691,898 to Rosenberg et al. discloses a computer input device that generates force feedback movement based on operation of a switch at the device and on force feedback commands generated by the host computer system.

U.S. Patent No. 6,057,828 to Rosenberg et al. discloses a force feedback mechanism for a host computer. A local microprocessor on the force feedback mechanism receives command from the host, decodes the commands, and outputs actuator signals to a mechanical system. The commands simulate touch sensations such as moving through fluids or impacting a surface or obstruction.

U.S. Patent No. 6,271,833 to Rosenberg et al. discloses a force feedback device in which the device is enabled only when an amount of weight over a predetermined amount is placed on the joystick of the device.

U.S. Patent No. 5,889,672 to Schuler et al. discloses an interface device for computers having programmable force position characteristics. The force position characteristics relay the tactile responsiveness of the device to the position of a cursor on a display screen.

U.S. Patent No. 6,195,592 to Schuler et al. discloses a force feedback interface system having tactile responsiveness that is flexibly programmable.

U.S. Patent No. 6,169,540 to Rosenberg et al. discloses a software interface for allowing a user to design force sensations for use by a force feedback interface device connected to a host computer.

-4-

ROYG-1-1001SUPPIDS

701 Fifth Avenue, Suite 4800

BLACK LOWE & GRAHAM ***

Searcle, Washington 98104 206.381.3300 • F: 206.381.3301

25315 CUSTOMER NUMBER

U.S. Patent No. 5,701,140 to Rosenberg et al. discloses a linkage system the movement of which is transduced into electrical signals that are processed by an application on a computer. Force feedback commands are transmitted back to the linkage apparatus. The linkage apparatus converts the force feedback commands into movement that is felt by the user.

U.S. Patent No. 5,739,811 to Rosenberg et al. discloses a system that send sensor data from a user interface device to a host computer. The system can operate on a host controlled environment in which force values are generated by the host computer or in a reflex environment in which force values are generated by a processor at the interface device given high levels of advisory commands generated by the host computer.

U.S. Patent No. 5,734,373 to Rosenberg et al. discloses a force feedback system for use by a host computer and a force feedback device. A local microprocessor at the force feedback device implements a local reflex process based on high level commands to generate force values for actuators at the force feedback device. The programmer of the host computer deals only with a relatively few high level host commands, with the bulk of the force feedback computation being handled at the local processor.

U.S. Patent No. 6,104,158 to Jacobus et al. discloses a force feedback system that simulates the presence of a force field around the user. This system includes a six-axis manipulator having two constant force springs that provide gravity compensation so that the manipulator floats.

U.S. Patent No. 6,219,033 to Rosenberg et al. discloses an input device for a computer having a local microprocessor that controls an actuator within the input device and provides sensor data to a host computer.

U.S. Patent No. 6,300,937 to Rosenberg discloses a force feedback interface device that operates in a host controlled embodiment or in a reflex embodiment.

U.S. Patent No. 6,232,891 to Rosenberg discloses a force feedback interface device that operates in isotonic and isometric control modes.

U.S. Patent No. 6,252,853 to Ohno discloses a label switching router employing a fault circumventing route table that allows continued communication between adjacent nodes on opposite sides of an ATM switch if a fault occurs on the data relay controller.

- 5 -

ROYG-1-1001SUPPIOS

701 Fifth Avenue, Suite 4800 Searde, Washington 98104 206.381.3300 • F: 206.381.3301

BLACK LOWE & GRAHAM

25315

U.S. Patent No. 6,278,439 to Rosenberg et al. discloses a system for shaping force signals for a force feedback device.

U.S. Patent No. 6,343,349 to Braun et al. discloses a force feedback system in which a representation of a memory device of a force feedback interface device is stored by the host computer.

U.S. Patent No. 6,259,382 to Rosenberg discloses a force feedback system that operates in isotonic and isometric control modes.

U.S. Patent No. 6,020,876 to Rosenberg et al. discloses a force feedback system having a disturbance filter for reducing or eliminating disturbances associated with the output force sensations. The filter removes the effect of feedback forces that would otherwise cause a controlled graphical object to be displayed in an undesired location.

U.S. Patent No. 6,310,605 to Rosenberg discloses a force feedback device that employs a selective disturbance filter to reduce or eliminate displayed disturbances associated with output force sensations.

U.S. Patent No. 5,959,613 to Rosenberg et al. discloses a force feedback system in which force signals sent to a force feedback device are shaped by a set of control parameters and modified by a set of impulse parameters.

U.S Patent No. 5,889,670 to Schuler et al. discloses a force feedback system for computer input in which the force position characteristics of the system are programmable and responsive to a position of the cursor on a display screen.

U.S. Patent No. 5,825,308 to Rosenberg discloses an interface for a feedback system. The interface system displays a physical object moveable in a physical space. In an isotonic mode, force sensations are applied to the physical object based on movement of the cursor and position of the physical object. In an isometric mode, input force applied by the user to the physical object results in input to the host computer.

U.S. Patent No. 6,252,579 to Rosenberg et al. discloses a force feedback interface device that employs a scaled cursor position in a display frame derived from a reference position of the mouse.

U.S. Patent No. 6,366,273 to Rosenberg et al. discloses a force feedback cursor control interface in which a host computer is interfaced with a device microprocessor.

-6-

ROYG-1-1001SUPPIDS

BLACK LOWE & GRAHAM ~~

25315 CLISTOMER NUMBER

701 Fifth Avenue, Suite 4800 Seartle, Washington 98104 206.381.3300 • F: 206.381.3301

- U.S. Patent No. 6,292,712 to Bullen discloses a multimedia interface system that incorporates text, audio, and video graphics with an outside environment such as a robotic device, machining device, or other tool.
- U.S. Patent No. 6,292,714 to Okabayashi discloses a system for integrating robot motion with content software running on a computer.
- U.S. Patent No. 6,480,896 to Brown et al. discloses a method of communicating motion data through a communications network.
- U.S. Publication No. 2002/0165627 to Brown et al. discloses a motion control system for controlling a target device for performing a desired motion operation.
- U.S. Patent No. 6,542,925 to Brown et al. discloses a system for communicating motion data through a distributed network.
- U.S. Patent No. 5,848,415 to Guck discloses a content server that uses an object database to support a network of clients. Virtual objects in the database enable the format of any source document to be converted to another compatible format to transport the appropriate protocol.
- U.S. Patent No. 6,173,316 to De Boor et al. discloses an extended form of HTML adapted for use by wireless telephones.
- U.S. Patent No. 6,519,646 to Gupta et al. discloses a system for encoding characteristics of data to be transferred that provides an optimal method of retrieving the data.
- U.S. Patent No. 6,038,603 to Joseph discloses a system in which a URL contains first and second values corresponding to presence of an encapsulating protocol and an operation protocol.

 A second computer provides a resource store that is accessed in accordance with the operation protocol.
- U.S. Publication 2002/0052939 to Lee discloses a system for distributing data recovery information over a communications network using a web server.
- U.S. Publication 2001/0020944 to Brown et al. discloses control software for generating and distributing motion media for operating a target motion device.
- U.S. Publication 2001/0032268 to Brown et al. discloses a system for allowing an application program to communicate with any one of the group supported hardware devices.

-7-

ROYG-1-1001SUPPIDS

25315 CUSTOMER NUMBER

701 Fifth Avenue, Suite 4800 Seattle, Washington 98104 206.381.3300 • F: 206.381.3301

BLACK LOWE & GRAHAM ***

II. NON-PATENT LITERATURE REFERENCES

"A Motion Control System with Event-driven Motion-module Switching Mechanism for Robotic Manipulators" by Katayama et al., dated July, 1993. This reference disclosed a motion control system that employs an event-driven motion module switching mechanism.

"An Event-Driven Architecture for Controlling Behaviors of the Office Conversant Mobile Robot, Jijo-2" by Matsui et al., dated April 1997. This document discloses a layered process network architecture based on an event-driven control model.

"How to Write and Use ActiveX Controls for Microsoft Windows CE 3.0" by Microsoft Corporation, dated June, 2000. This document discloses how to build and distribute ActiveX controls for Windows CE.

"Notes on Implementing an OLE Control Container" by K. Brockschmidt of Microsoft Corporation, dated September 21, 1994. This document discloses the programming of container applications that can interact and exploit OLE controls.

"What OLE Is Really About" by K. Brockschmidt of Microsoft Corporation, dated July, 1996. This document discusses how OLE addresses practical problems encountered in operating systems and applications.

"Categorizing by Component Capabilities" by Microsoft Corporation, dated November, 2001. This document discusses the use of category IDs to identify component categories.

-8-

ROYG-1-1001SUPPIDS

BLACK LOWE & GRAHAM

701 Fifth Avenue, Suite 4800 Seattle, Washington 98104 206.381.3300 • F: 206.381.3301

25315 CUSTOMER NAMBER

CONCLUSION

The Applicant respectfully submits that the cited references in this case, taken alone or in combination, neither anticipate nor render obvious the claims of the present invention. Consideration of the foregoing in relation to the pending application is respectfully requested. If there is any matter that needs attention, and if the Examiner feels that consultation with the applicant's agent, the undersigned herein, would be of value, then such consultation would be welcome. The applicant's attorney can be reached at the phone number noted below.

Copies of Non-patent literature references listed on the attached Form PTO-1449 are enclosed herewith, along with a return receipt postcard.

Respectfully submitted,

BLACK LOWE & GRAHAMPILO

Mark D. Byrne

Registration No. 50,125 Direct Dial: 206.957.2481

MAIL CERTIFICATE

I hereby certify that this communication is being deposited with the United States Postal Service via Express Mail under 37 C.F.R. § 1.08 on the date indicated below addressed to: BOX RCE Commissioner for Patents, Washington, D.C., 20231.

-9-

ROYG-1-1001SUPPIDS

BLACK LOWE & GRAHAM ***

701 Fifth Avenue, Suite 4800 Searde, Washington 98104 206.381.3300 • F: 206.381.3301

25315 **CUSTOMER NUMBER**

lease type	a olus	sion (+) inside	this box	

Sheet

PTO/SB/08A (08-00)
Approved for use
U.S. Patent and Trademark Office: U.S.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

5

of

C	omplete if Known	
Application Number	09/633.633	
Filing Date	August 7, 2000	
First Named Inventor	David W. Brown	
Group Art Unit	2124	
Examiner Name	John Q. Chavis	
Attorney Docket Number	ROYG-1-1001	

				U.S. PATENT DOC	URENIS		
Extenimer Initiats*	Cite No. ²	U.S. Patent Number	Kind Code ²	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		6.292,174		Mallett et al.	09/18/2001		
		6,028.593		Rosenberg et al.	02/22/2000		
		5.821.920		Rosenberg et al.	10/13/1998		
		6.147.647		Tassoudji et al.	11/14/2000		
		6.353,850		Wies et al.	03/05/2002		
		6,061,004		Rosenberg	05/09/2000		
		6,046.727		Rosenberg et al.	04/04/2000		
		6.219.032		Rosenberg et al.	04/17/2001		
		6.078.308		Rosenberg et al.	06/20/2000		
		6,317,116		Rosenberg et al.	11/13/2001		
		6.246.390		Rosenberg	06/12/2001		
		6,100,874		Schena et al.	08/08/2000		
		6,166,723		Schena et al.	12/26/2000		
		6.128.006		Rosenberg et al.	10/03/2000		
		6.243.078		Rosenberg	06/05/2001		
		6,191,774	_	Schena et al.	02/20/2001		
		6.131.097		Peurach et al.	10/10/2000		
		6.374.255		Peurach et al.	04/16/2002		
		6.285.351		Chang et al.	09/04/2001		
		6.300.936		Braun et al.	10/09/2001		

				FORE	IGN PATENT DOCUMENT	rs		
Examiner	Cite		oreign Patent Do	cument	Name of Patentee or	Date of Publication of	Pages, Columns, Lines,	T
elaitied	No.1	Office ³	Number	Kind Code ⁵ (If known)	Applicant of Cited Document	Cited Document MM-DD-YYYY	Where Relevent Passages or Relevant Figures Appear	7
			 					
								\mathbf{L}^{-}
				1 1				

Examiner	Date	
Signature	Considered	I :

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will very depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO BOX 1450 ALEXANDRIA VA 22313-1450.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number 2 See attached Kinds of U.S. Patent Documents 3 Enter Office that Issued the document, by the two-letter code (WIPO Standard ST.3) 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document s Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible «Applicant is to place a check mark here if English language Translation is attached.

Please	type a	plus	sign	(+)	inside	this	box	

Sheet

Approved for use th U.S. Patent and Trademark Office: U. PTO/SB/08A (08-00) 10/31/2002. OMB 0651-0031 PARTMENT OF COMMERCE

U.S. Patent and Trademark Office: U.S. PARTMENT OF COMMERCIAL U.S. Patent and Trademark Office: U.S. PARTMENT OF COMMERCIAL U.S. Patent and Trademark Office: U.S. PARTMENT OF COMMERCIAL U.S. Patent and Trademark Office: U.S. PARTMENT OF COMMERCIAL U.S. Patent and Trademark Office: U.S. PARTMENT OF COMMERCIAL U.S. PARTMENT OF COMMERCIAL

TIN O 1 5001

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

of 5

a	omplete if Known	
Application Number	09/633,633	
Filing Date	August 7, 2000	
First Named Inventor	David W. Brown	
Group Art Unit	2124	
Examiner Name	John O. Chavis	
Attorney Docket Number	ROYG-1-1001	

	U.S. PATENT DOCUMENTS						
Examiner Initiats*	Cite No. ²		ocument Kind Code ²	Name of Patentee or Applicant of Cited Document	Data of Publication of Cited Occurrent MM-DD-YYYY	Pages, Columns, Lines, Where Ratevant Passages or Relevent Figures Appear	
		6,304,091		Shahojan et al.	10/16/2001		
		6,288,705		Rosenberg et al.	09/11/2001		
		5,438,529		Rosenberg et al.	08/01/1995		
		5.623.582		Rosenberg	04/22/1997		
		5,576,727		Rosenberg et al.	11/19/1996		
		5,691,898		Rosenberg et al.	11/25/1997		
		6,057,828		Rosenberg et al.	05/02/2000		
		6.271.833		Rosenberg et al.	08/07/2001		
		5.889.672		Schuler et al.	03/30/1999		
		6,195,592		Schuler et al.	02/27/2001		
		6,169,540		Rosenberg et al.	01/02/2001		
		5,701,140		Rosenberg et al.	12/23/1997		
		5,739,811		Rosenberg et al.	04/14/1998		
		5.734.373		Rosenberg et al.	03/31/1998_		
		6,104,158		Jacobus et al.	08/15/2000		
		6,219,033		Rosenberg et al.	04/17/2001		
		6.300,937		Rosenberg	10/09/2001		
		6.232.891		Rosenberg	05/15/2001		
		6,252,853		Ohno	06/26/2001		
		6.278.439		Rosenberg et al.	08/21/2001		

				FORE	IGN PATENT DOCUMEN'	13	****	
Exeminer	Cite		oreign Patent Do		Name of Patentee or	Date of Publication of	Pages, Columns, Lines, Where Relevant	
hiteh*	No.	Office ³	Number	Kind Code ⁵ (If known)	Applicant of Cited Document	Cited Document MM-DD-YYYY	Pessages or Relevant Figures Appear	1"
								L
								╀
						<u> </u>		+
						 		╇
						 	<u>-</u> .	╀
		├ - 				 		╀
		┝╌├╌			·-	 		╫

Examiner		Date	
Signature		Considered	
, -	1		

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO BOX 1450 ALEXANDRIA VA 22313-1450.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant.

¹ Unique citation designation number 2 See attached Kinds of U.S. Patent Documents 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3) 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible 5 Applicant is to place a check mant here if English language Translation is attached.

Approved for use to U.S. Patent and Trademark Office: U.

PTO/SB/08A (08-00) 10/31/2002. OMB 0851-0031 EPARTMENT OF COMMERCE

U.S. Patent and Trademark Office: U.S. PARTMENT OF COMMERCE UNIT OF COMMER

JUN 0 1 5007 8

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

C	amplete if Known	
Application Number	09/633,633	
Filing Date	August 7, 2000	
First Named Inventor	David W. Brown	
Group Art Unit	2124	
Examiner Name	John O. Chavis	

Sheet 3 of 5 Attorney Docket Number ROYG-1-1001

Examiner	All Market Had Harrison Had Harrison Had Description								
Initiato*	No.2	Number Kind Code ²	of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear				
		6.343.349	Braun et al.	01/29/2002					
		6,259,382	Rosenberg	06/10/2001					
		6.020.876	Rosenberg et al.	02/01/2000	· · · · · · · · · · · · · · · · · · ·				
		6.310.605	Rosenberg	10/30/2001					
		5,959,613	Rosenberg et al.	11/28/1999					
		5,889,670	Schuler et al.	03/30/1999					
		5.825.308	Rosenberg	10/20/1998					
		6.252.579	Rosenberg et al.	06/26/2001					
		6.366.273	Rosenberg et al.	04/02/2002					
		6,292,712	Bullen	09/18/2001					
		6,292,714	Okabayashi	09/18/2001					
		6,480,896	Brown et al.	11/12/2002					
		6,366,272	Rosenberg et al.	04/02/2002	 				
		<u> </u>							
				-					

				FORE	IGN PATENT DOCUMENT	. S		
	Cite	Foreign Patent Document		Name of Patentee or	Date of Publication of	Pages, Columns, Linus, Where Relevant		
	Cite No. ¹	Office ³	Number	Kind Code (if known)	Applicant of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear	T*
								┷
-		Г		I				┷
								┷
								↓
								┼
	<u> </u>	<u> </u>				<u> </u>		$+\!-$
	↓	 						+
<u> </u>	ļ	igspace			·-·			╫
i	1			1 1		<u> </u>		

Exami		Date	
1		Considered	
Signati	<u></u>		<u> </u>

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO BOX 1450 ALEXANDRIA VA 22313-1450.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 608. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant.

¹ Unique citation designation number 2 See attached Kinds of U.S. Patent Documents 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3) 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document a Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible 4 Applicant is to place a check mark here if English language Translation is attached.

Please h	me e	ohra	sion	/+۱	incide	this	hav
ricase i	po a	u	DINTE !	LT,	HINNE	uas	OUX -

Approved for use U.S. Patent and Trademark Office: PTO/SB/08A (08-00) th 10/31/2002. OMB 0651-0031 DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office: DEPARTMENT OF COMMERCI Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 14498/PTO
JUN 0 4 2894 B INFORMATION I

Sheet

RADEMARKO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

of

Complete if Known					
Application Number	09/633,633				
Filing Date	August 7, 2000				
First Named Inventor	David W. Brown				
Group Art Unit	2124				
Examiner Name	John Q. Chavis				
Attorney Docket Number	ROYG-1-1001				

			U.S. PATENT DOC	CUMENTS		
Examiner Initials'	Cite No. ²	U.S. Patent Document Number Kind Code ²	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Floures Appear	
		US02/0165627	Brown et al.	11/07/2002		
		6.542.925	Brown et al.	04/01/2003		
		5.848,415	Guck	12/08/1998		
		6,173.316	De Boor et al.	01/09/2001		
		6.519.646	Gupta et al.	02/11/2003		
		6,038,603	Joseph	03/14/2000		
		2002/0052939	Lee	05/02/2002		
		2001/0020944	Brown et al.	09/13/2001		
		2001/0032268	Brown et al.	10/18/2001		
I		4,769,771	Lippmann et al.	09/06/1988		
		2003/0069998	Brown et al.	04/10/2003		
		2002/0177453	Chen et al.	09/18/2003		

				FOR	EIGN PATENT DOCUMENT	rs		
Examiner	Cite No.1	Cite Foreign Patent Document			Name of Patentee or	Date of Publication of	Pages, Columns, Lines, Where Relevant	
tnikista*		Office ³	Number	Kind Code ⁸ (# known)	Applicant of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevent Figures Appear	T*
		<u> </u>						<u> </u>
								╀
	 	┠╼╌╂╼╌						+
								1
								I
							-	╀
							 -	+
						 		+

Examiner	Date
Signature	Considered

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant.

¹ Unique citation designation number 2 See attached Kinds of U.S. Patent Documents 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3) 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible 4 Applicant is to place a check mark here if English language Translation is attached.



PTO/SB/08B (10-01)

Approved for use through 10/31/2002 OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute i	for form 1449B/PTO			Complete if Known			
INFORMATION DISCLOSURE				Application Number	09/633,633		
INFU	KIMATION	DISC	LOSUKE	Filing Date	August 7, 2000		
STATEMENT BY APPLICANT		First Named Inventor	David W. Brown				
VIAI			LIOAII	Group Art Unit	2124	/633,633 ust 7, 2000 d W. Brown 2124 n Q. Chavis	
	(use as many sh	eets as n	ecessary)	Examiner Name	John Q. Chavis		
Sheet	5	of	5	Attorney Docket Number	ROYG-1-1001		

OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS							
Examiner Initials	Cite No.1	include name of the euthor (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where mublished.	ŀ				
		Y. Katayama, Y. Nanjo and K. Shimoloxa; A MOTION CONTROL SYSTEM WITH EVENT-DRIVEN MOTION-MODULE SWITCHING MECHANISM FOR ROBOTIC MANIPULATORS; 1993; IEEE; U.S.					
		Toshihiro Matsui et al; AN EVENT-DRIVEN ARCHITECTURE FOR CONTROLLING BEHAVIORS OF THE OFFICE CONVERSANT MOBILE ROBOT, Jijo-2; 1997; IEEE; U.S.					
***************************************		HOW TO WRITE AND USE ACTIVEX CONTROLS FOR MICROSOFT WINDOWS CE 3.0; Microsoft Windows Website; August 16, 2002; U.S. ms-help://MS.MSDNQTR.2002JAN.1033/dnce30/html/activex30.htm					
		NOTES ON IMPLEMENTING AN OLE CONTROL CONTAINER; August 16, 2002; U.S.; ms-help://ms.msDNQTR.2002JAN.1033/dnaxctrl/html/msdn_contcntr.htm					
	[WHAT OLE IS REALLY ABOUT; Microsoft OLE (General) Technical Articles; Microsoft Website; August 16, 2002; U.S.; ms-help://MS.MSDNQTR.2002JAN.1033/dnolegen/html/msdn_aboutole.htm					
		Platform SDK: COM; CATEGORIZING BY COMPONENT CAPABILITIES; Microsoft Website; August 16, 2002; U.S.; ms-help://MS.MSDNQTR.2002JAN.1033/com/comp_cat_3;qr.htm					
			<u> </u>				

Examiner		Date	
Signature	· · · · · · · · · · · · · · · · · · ·	 Considered	

^{&#}x27;EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.